

REMARKS

By the above amendment, minor informalities in the specification have been corrected, and in light of the objection to the abstract of the disclosure, the abstract has been deleted and a new abstract has been provided in accordance with the requirements therefor.

Before discussing the rejection of the claims as set forth in the Office Action, applicants note that applicants submit that the Office Action is incomplete and/or misleading in failing to properly indicate that claims 1-61 are pending in the application and that claims 10-22, 24-41 and 45-52 stand withdrawn from consideration in light of the election requirement set forth in the Office Action dated April 27, 2004, and the Response filed June 24, 2004 in which species 1 - Figs. 1 and 5-8 was provisionally elected, with traverse, with applicants submitting that claims 1-9, 23, 42-44 and 53-61 are readable on the elected species. Applicants note that all of such claims are pending in this application and while the Examiner indicates in the Office Action Summary that claims 1-9, 23, 43, 44 and 53-61 are pending in the application, and that claims 1-9, 23, 43, 44 and 53-61 are rejected, the body of the Office Action indicates that claims 1-9, 23, 42-44 and 53-61 are rejected. However, the Office Action fails to indicate the disposition of the other claims which apparently should stand withdrawn from consideration.

Applicants further note that many of the claims which apparently stand withdrawn from consideration depend directly or indirectly from claims under consideration which are considered to be generic or sub-generic claims, and upon allowance of such claims, at least those claims should be considered allowable with the parent claims.

As to the rejection of claims 60, 61 under 35 U.S.C. §102(e) as being anticipated by Inoue et al (2002/0154104 A1) and the rejection of claims 1-9, 23, 42-44, 53-59 under 35 U.S.C. §103(a) as being unpatentable over Inoue et al (US

2002/0154104 A1) in view of Shiotani et al (JP 2000-293142) and Takatori et al (JP 11-237606), such rejections are traversed, and reconsideration and withdrawal of the rejections are respectfully requested.

As to the requirements to support a rejection under 35 U.S.C. 102, reference is made to the decision of In re Robertson, 49 USPQ 2d 1949 (Fed. Cir. 1999), wherein the court pointed out that anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claim is found, either expressly or inherently described in a single prior art reference. As noted by the court, if the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if the element is "inherent" in its disclosure. To establish inherency, the extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." Moreover, the court pointed out that inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.

With regard to the requirements to support a rejection under 35 U.S.C. 103, reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court pointed out that the PTO has the burden under §103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further

noted by the court, one cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

Furthermore, such requirements have been clarified in the recent decision of In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002) wherein the court in reversing an obviousness rejection indicated that deficiencies of the cited references cannot be remedied with conclusions about what is "basic knowledge" or "common knowledge".

The court pointed out:

The Examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is immaterial to patentability, and could not be resolved on subjected belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher."... Thus, the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. (emphasis added)

Turning first to the rejection of claims 60 and 61 under 35 U.S.C. §102 as being anticipated by Inoue et al, applicants note that while the Examiner at page 4 of the Office Action apparently attempts to utilize language found in the claims while referring to different portions of Inoue et al as disclosing in the sense of 35 U.S.C. §102 the indicated claimed features, applicants submit that contrary to the position set forth by the Examiner, Inoue et al fails to disclose the features contended to be present therein by the Examiner. For example, irrespective of the language of claim 60, the Examiner contends "preset writing is executed on a full surface of a screen in synchronization with a frame signal (page 7, paragraph 20, lines 5-17, pages 12,

paragraph 161, lines 1-12)". Even though paragraph 20 of Inoue et al appears at page 2 (not page 7 of Inoue et al, with paragraph 105 appearing at page 7), applicants submit that neither paragraph 20 nor paragraph 105 of Inoue et al provide a disclosure of the features contended to be present by the Examiner therein.

Likewise, paragraph 161 or lines 1-12 at page 12 of Inoue et al do not provide a disclosure of the features contended to be present by the Examiner. As to the Examiner's allegation that "the image is made visible by intermittently lighting an illuminator" with the Examiner referring to page 12, paragraph 161, lines 1-12, applicants submit that paragraph 161 or page 12, lines 1-12, fail to provide any disclosure of the image being made visible by intermittently lighting an illuminator, as contended by the Examiner. Furthermore, the Examiner alleges that "a period obtained by subtracting a preset displaying period of each line from the one frame period" (emphasis added) is disclosed at page 4, paragraph 56, lines 1-4 and page 7, paragraph 105, lines 1-16 of Inoue et al. Contrary to the position set forth by the Examiner, applicants submit that Inoue et al at the portions indicated by the Examiner provide no disclosure of such features. Applicants note that to support a rejection under 35 U.S.C. §102, a single reference must disclose all claimed features, and applicants submit that the portions of Inoue et al referred to by the Examiner fail to provide the features alleged to be present therein by the Examiner.

Applicants note that claim 60 more particularly recites the feature of "distribute a residual period obtained from subtracting a preset displaying period of each line from one frame period substantially equal to positive and negative polarity displayings of each line" and irrespective of the Examiner's contention, there is no disclosure in Inoue et al of preset writing nor the features as recited in claims 60 and 61. Thus, applicants submit that claim 60 patentably distinguishes over Inoue et al in the sense of 35 U.S.C. §102 and should be considered allowable thereover.

As to claim 61, the Examiner in a manner similar to claim 61 contends that Inoue et al teaches preset writing is executed on a full surface of a screen in synchronization with a frame signal referring to page 7, paragraph 20, lines 5-17 and page 12, paragraph 161, lines 1-12, which, as pointed out above, is an erroneous position of the Examiner. Additionally, the Examiner contends that Inoue et al teaches "a first writing period, a first holding period, a second writing period, and a second holding period, to be driven in the sequence, reverse writing voltage polarities of the first and second writing periods, and set the second writing period to be about 1/2 of the first writing period" (emphasis added) referring to page 10, paragraph 133-136 of Inoue et al. Applicants submit that Inoue et al does not recite such features of claim 61 in the sense of 35 U.S.C. §102, and the Examiner's allegation that such features are present in Inoue et al that the location indicated is contrary to the disclosure of Inoue et al. Thus, applicants submit that claim 61 patentably distinguishes over Inoue et al in the sense of 35 U.S.C. §102 and claim 61 should be considered allowable at this time.

Applicants note that claims 60 and 61 recite the distribution of a residual period obtained from subtracting a preset displaying period of each line from one frame period substantially equally deposited and negative polarity displayings of each line and a preset writing period with the setting of the second writing period to be about 1/2 of the first writing period and Inoue et al fails to disclose such features. Thus, claims 60 and 61 patentably distinguish over Inoue et al in the sense of 35 U.S.C. §102 and should be considered allowable thereover.

With regard to the combination of Inoue et al, Shiotani et al and Takatori et al in rejecting claims 1-9, 23, 42-44 and 53-59 under 35 U.S.C. §103, the Examiner utilizes Inoue et al in a manner similar to that with respect to claims 60 and 61 and applicants submit that the features contended to be present in Inoue et al are not

disclosed or taught by Inoue et al. In fact, in the first full paragraph at page 6 of the Office Action, the Examiner states:

However, Inoue et al fails to teach specifically or recite the image is made visible by intermittently light an illuminator. (emphasis added)

This recognition by the Examiner is contrary to the previous statement of the Examiner that "the image is made visible by intermittently lighting an illuminator" referring to page 12, paragraph 161, lines 1-12. Applicants note that in the claims under rejection, the following structural elements are generally included:

(I) both polarities, positive and negative, are displayed in one frame period, a period obtained by subtracting a preset displaying period of each line from the one frame period is substantially equally distributed between positive polarity and negative polarity;

(II) the image is made visible by intermittently lighting an illuminator; and

(III) preset writing is executed on a full surface of the screen in synchronization with a frame signal.

Applicants submit that the mentioned features are not disclosed or taught in the cited art and that the cited art cannot be properly combined in an attempt to provide such claimed features. Applicants note that the deficiencies of Inoue et al have been pointed out above, and have, at least with regard to intermittently lighting an illuminator, have been recognized by the Examiner. The Examiner cites Shiotani et al as disclosing various features and applicants submit that other than Shiotani et al disclosing that an image is made visible by intermittently lighting an illuminator, the other features allegedly present in Shiotani et al are not disclosed or taught at the portions of Shiotani et al referred to by the Examiner. The Examiner contends that it would have been obvious to incorporate the teachings of Shiotani et al into the Inoue et al teachings, and applicants submit that such position by the Examiner represents

a hindsight reconstruction attempt contrary to the disclosures and teachings of the individual references, and failing to provide the claimed features.

As to the combination of Inoue et al and Shiotani et al, applicants note that Inoue et al discloses a technology referred to as PWM (pulse width modulation) in general, which uses two values of transmittivity (H, L) and carry out tone expression with time width control. In accordance with Inoue et al, when displaying data (111) expressing maximum luminance with three bits tone data, transmittivity of H during the entirety of one frame is utilized, and when displaying data (000) for expressing the lowest luminance (black) transmittivity of L is utilized during the entirety of one frame. For expressing an intermediate tone, transmittivity of H is utilized during half of one frame and transmittivity of L is utilized during the other half of the frame. In this manner, all of the tone is expressed by a time ratio of H transmittivity and L transmittivity. Thus, in Inoue et al, a backlight is always required to be lighted, and it is contrary to the specific disclosure of Inoue et al to contend that it is obvious to utilize the disclosure of Shiotani which intermittently is lighted up only in a prescribed time within one field. As such, applicants submit that in addition to the suggested combination failing to provide the other claimed features in the sense of 35 U.S.C. §103, applicants submit that the attempt to utilize intermittent lighting period of an illuminator is contrary to the disclosure of Inoue et al and these references cannot be properly combined in the sense of 35 U.S.C. §103. See In re Fine, supra and In re Lee, supra.

With respect to the addition of Takatori et al, applicants submit that while this reference may be considered to disclose the carrying out of preset writing, Takatori et al cannot be properly combined with the other cited art and fails to overcome the deficiencies of the other cited art, as pointed out above. Thus, applicants submit that claims 1-9, 23, 42-44 and 53-59 patentably distinguish over this proposed

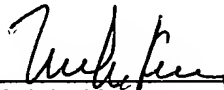
combination of references in the sense of 35 U.S.C. §103 and should be considered allowable at this time.

Applicants note that all claims present in this application are considered to patentably distinguish over the cited art and should be considered, and specifically, those claims which stand withdrawn from consideration and depend directly or indirectly from an allowed parent claim should be considered at this time and determined to be allowable.

In view of the above amendments and remarks, applicants request favorable action with respect to all claims present in this application.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 01-2135 (500.41513X00) and please credit any excess fees to such deposit account.

Respectfully submitted,



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